

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently Amended) A method comprising:  
  
    computing ~~a plurality of random excitations based on~~ a plurality of random noise samples;  
  
    storing the ~~random excitations~~ plurality of random noise samples in a lookup table;  
  
    detecting for a voice activity in a signal; and  
  
    if the voice activity is not detected, encoding [[ the ]] a first data frame of the signal to create a first non active voice signal if no voice activity is detected frame, including  
  
        ~~computing for a frame of the non active voice signal an excitation based on a scale factor and one of the random excitations,~~  
  
        generating a first excitation based on the plurality of random noise samples of the lookup table, and  
  
        generating the first non active voice frame based on a scale factor and the first excitation; and  
  
        reusing the lookup table to encode a next data frame of the signal subsequent to the first data frame only if the next data frame of the signal is not an active voice data frame, the reusing including  
  
            altering the scale factor based on any change in a noise condition of the signal, and  
  
            ~~computing for another frame of the non active voice signal another excitation based on the altered scale factor and the random excitations, the another excitation representative of the noise condition of the signal~~

generating a second excitation based on the plurality of random noise samples of the lookup table, and

generating a second non active voice frame based on the scale factor and the second excitation.

2. (Previously Presented) The method of claim 1 further comprising padding an excitation with zeros if a gain of a frame of the non active voice signal is zero.
3. (Original) The method of claim 2 further comprising generating random adaptive codebook parameters and fixed codebook parameters.
4. (Currently Amended) The method of claim 3 wherein computing [[ an ]] the first excitation for a frame of the non active voice signal includes:
  - generating a random adaptive excitation based on the random adaptive codebook parameters;
  - computing a sum of the random adaptive excitation and one of the random ~~excitations~~ noise samples; and
  - rescaling the sum of the random adaptive excitation and one of the random ~~excitations~~ noise samples.
5. (Currently Amended) The method of claim 4 wherein computing [[ an ]] the first excitation for a frame of the non active voice signal further includes:
  - computing a fixed codebook gain based on the fixed codebook parameters; and
  - updating the ~~current~~ rescaled excitation with an algebraic-code-excited linear-prediction excitation.

6. (Original) The method of claim 1 wherein the random noise samples are Gaussian noise samples.

7. (Currently Amended) A storage medium comprising content, which when executed by an accessing machine, causes the accessing machine to implement a method comprising:

computing a ~~plurality of random excitations based on~~ a plurality of random noise samples;

storing the ~~random excitations~~ plurality of random noise samples in a lookup table;

detecting for a voice activity in a signal; and

if the voice activity is not detected, encoding [[ the ]] a first data frame of the signal to create a first non active voice signal if no voice activity is detected frame, including

~~computing for a frame of the non active voice signal an excitation based on a scale factor and one of the random excitations;~~

generating a first excitation based on the plurality of random noise samples of the lookup table, and

generating the first non active voice frame based on a scale factor and the first excitation; and

reusing the lookup table to encode a next data frame of the signal subsequent to the first data frame only if the next data frame of the signal is not an active voice data frame, the reusing including

altering the scale factor based on any change in a noise condition of the signal, and

~~computing for another frame of the non active voice signal another excitation based on the altered scale factor and the random excitations, the another excitation representative of the noise condition of the signal~~

generating a second excitation based on the plurality of random noise samples of the lookup table, and

generating a second non active voice frame based on the scale factor and the second excitation.

8. (Previously Presented) The storage medium of claim 7 comprising content, which when executed by an accessing machine, causes the accessing machine to implement the method further comprising padding an excitation with zeros if a gain of a frame of the non active voice signal is zero.

9. (Original) The storage medium of claim 8 comprising content, which when executed by an accessing machine, causes the accessing machine to implement the method further comprising generating random adaptive codebook parameters and fixed codebook parameters.

10. (Currently Amended) The storage medium of claim 9 wherein computing [[ an ]] the first excitation for a frame of the non active voice signal includes:

generating a random adaptive excitation based on the random adaptive codebook parameters;

computing a sum of the random adaptive excitation and one of the random ~~excitations~~ noise samples; and

rescaling the sum of the random adaptive excitation and one of the random ~~excitations~~ noise samples.

11. (Currently Amended) The storage medium of claim 10 wherein computing [[ an ]] the first excitation for a frame of the non active voice signal further includes:

computing a fixed codebook gain based on the fixed codebook parameters; and

updating the ~~current~~ rescaled excitation with an algebraic-code-excited linear-prediction excitation.

12. (Original) The storage medium of claim 7 wherein the random noise samples are Gaussian noise samples.

13. (Currently Amended) An apparatus comprising:

an encoder coupled to a communication channel wherein the encoder is to compute ~~for a first frame of a non active voice signal an excitation based on a scale factor and one of a plurality of random excitations the encoder further to compute for a second frame of the non active voice signal another excitation based on the scale factor and the random excitations, where the scale factor has been altered since the computing of the first frame based on a noise condition of the signal, the another excitation representative of the noise condition of the signal~~ a plurality of random noise samples and to store the plurality of random noise samples in a lookup table, the encoder further to encode, if a voice activity is not detected in the signal, a first data frame of the signal to create a first non active voice frame, wherein the encoder is

to generate a first excitation based on the plurality of random noise samples of the lookup table, and

to generate the first non active voice frame based on a scale factor and the first excitation,

the encoder further to reuse the lookup table to encode a next data frame of the signal subsequent to the first data frame only if the next data frame of the signal is not an active voice data frame, wherein the encoder is

to alter the scale factor based on any change in a noise condition of the signal,

to generate a second excitation based on the plurality of random noise samples of the lookup table, and

to generate a second non active voice frame based on the scale factor and the second excitation;

a voice activity detector coupled to the encoder to detect for a non active voice signal;

a decoder coupled to the communication channel, the decoder further comprising a comfort noise generator to generate comfort noise if the voice activity detector detects the non active voice signal.

14. (Previously Presented) The apparatus of claim 13, the comfort noise generator further configured to pad an excitation with zeros if a gain of a frame of the non active voice signal is zero.

15. (Original) The apparatus of claim 14, the comfort noise generator further configured to generate random adaptive codebook parameters and fixed codebook parameters.

16. (Currently Amended) The apparatus of claim 15, wherein computing [[ an ]] the first excitation ~~for a frame of the non active voice signal~~ includes:

generating a random adaptive excitation based on the random adaptive codebook parameters;

computing a sum of the random adaptive excitation and one of the random ~~excitations~~ noise samples; and

rescaling the sum of the random adaptive excitation and one of the random ~~excitations~~ noise samples.

17. (Currently Amended) The apparatus of claim 16, wherein computing [[ an ]] the first excitation ~~for a frame of the non active voice signal~~ further includes:

computing a fixed codebook gain based on the fixed codebook parameters; and

updating the ~~current~~ rescaled excitation with an algebraic-code-excited linear-prediction excitation.

18. (Canceled).

19. (Currently Amended) The apparatus of claim || 18 || 13 wherein the random noise samples are Gaussian noise samples.

20. (Currently Amended) A storage medium containing content which, when executed by an accessing machine, causes the accessing machine to generate:

an encoder coupled to a communication channel wherein the encoder is to compute ~~for a first frame of a non active voice signal an excitation based on a scale factor and one of a plurality of random excitations the encoder further to compute for a second frame of the non active voice signal another excitation based on the scale factor and the random excitations, where the scale factor has been altered since the computing of the first frame based on a noise condition of an audio signal, the another excitation representative of the noise condition of the audio signal a plurality of random noise samples and to store the plurality of random noise samples in a lookup table, the encoder further to encode, if a voice activity is not detected in the signal, a first data frame of the signal to create a first non active voice frame, wherein the encoder is~~

to generate a first excitation based on the plurality of random noise samples of the lookup table, and

to generate the first non active voice frame based on a scale factor and the first excitation,

the encoder further to reuse the lookup table to encode a next data frame of the signal subsequent to the first data frame only if the next data frame of the signal is not an active voice data frame, wherein the encoder is

to alter the scale factor based on any change in a noise condition of the signal,

to generate a second excitation based on the plurality of random noise samples of the lookup table, and

to generate a second non active voice frame based on the scale factor and the second excitation;

a voice activity detector coupled to the encoder to detect for the non active voice signal;

a decoder coupled to the communication channel, the decoder further comprising a comfort noise generator to generate comfort noise if the voice activity detector detects the non active voice signal.

21. (Previously Presented) The storage medium of claim 20, the comfort noise generator further configured to pad an excitation with zeros if a gain of a frame of the non active voice signal is zero.

22. (Original) The storage medium of claim 21, the comfort noise generator further configured to generate random adaptive codebook parameters and fixed codebook parameters.

23. (Currently Amended) The storage medium of claim 22, wherein computing [[ an ]] the first excitation for a frame of the non active voice signal includes:

generating a random adaptive excitation based on the random adaptive codebook parameters;

computing a sum of the random adaptive excitation and one of the random excitations noise samples; and

rescaling the sum of the random adaptive excitation and one of the random excitations noise samples.



24. (Previously Presented) The storage medium of claim 23, wherein computing [[ an ]] ~~the first excitation for a frame of the non-active voice signal~~ further includes:

computing a fixed codebook gain based on the fixed codebook parameters; and

updating the ~~current~~ rescaled excitation with an algebraic-code-excited linear-prediction excitation.

25. (Canceled).

26. (Currently Amended) The storage medium of claim [[ 25 ]] 20 wherein the random noise samples are Gaussian noise samples.

Claims 27 - 40. (Canceled).